

**REMARKS**

Reconsideration and withdrawal of the restriction requirement and election of species are respectfully requested in view of the remarks herewith.

Group I is directed to claims 1-40, drawn to an artificial antigen presenting cell. The Office Action maintains that Group I includes claims of a patentably distinct species, defined by a cell source, cell type, accessory molecule, HLA and T cell epitope.

In response to the requirement for a species election, the cell source selected is human; the cell type selected is fibroblast; the accessory molecule selected is B7.1; the HLA selected is A2.1; and the T cell epitope selected is E495 (NLVMVATV). Support for the recitation of B7.1 is on page 1, line 16 and page 14, lines 5-8 of the specification as originally filed; HLA A2.1 is on page 10, line 25 and page 14, line 10 of the specification as originally filed and E495 is on page 40, line 26 of the specification as originally filed. The sequence of E495 is known in the art to be NLVMVATV (see the peptide synthesis section under Materials of Methods in Papanicolaou et al., Blood. 2003 Oct 1;102(7):2498-505, previously presented).

The election of species is traversed, and made with the understanding that the generic claims will be searched once the species is otherwise determined to be patentable.

As a traverse, the Examiner is respectfully requested to withdraw the species election. M.P.E.P. § 808.01(a) states that “where there is no disclosure of relationship between species (see M.P.E.P. §806.04 (b)), they are independent inventions and election of one invention” is required. In view of M.P.E.P. §803, however, when the generic claim includes sufficiently few species that a search and examination of all the species at one time would not impose a serious burden on the Examiner, then a requirement for election is inappropriate. There is no undue burden in searching Group I in the absence of a species election. At a minimum, the species election of a cell source, cell type and accessory molecule from the claims of Group I should be withdrawn.

In the instant case, there is a disclosure of relationship between the claimed species. Applicants' claims are directed to, *inter alia*, parental AAPCs expressing b2-microglobulin and at least one exogenous accessory molecule and methods for using these cells. The utility of the claimed AAPCs is to stimulate T cell production. The species merely relate to the various components of the AAPC. Consequently, there is a disclosed relationship between the species. The search of any species would be co-extensive and include the remaining species. For

example, the search will consider any cell source, cell type and accessory molecule and therefore, become co-extensive.

Moreover, AAPCs of the invention are not limited to just one accessory molecule. Selection of a single accessory molecule is unduly restrictive.

As evidence of no undue or serious burden in withdrawing entirely the species election, pages of the International Search Report and International Preliminary Examination Report for PCT/US00/14668, of which this application is a national phase application were previously submitted. The documents show that claims as herein pending had unity of Invention during International Prosecution, evincing that the species requirement should be reconsidered and withdrawn or reformulated as there cannot be any undue or serious burden in searching and examining all of the pending claims. These documents provide evidence of the holding of Unity of Invention made during International Prosecution (incorporated herein by reference) and the fact that there has already been a determination of Unity of Invention by the International Authority and a Search and examination based upon that determination, such that clearly there is no undue or serious burden on the Examiner in searching and examining all of the claims.

In view of the above, reconsideration and withdrawal of the election of species requirement are requested.

In summary, enforcing the present restriction and election requirements would result in inefficiencies and unnecessary expenditures by both the Applicants and the PTO, as well as extreme prejudice to Applicants (particularly in view of GATT, whereby a shortened patent term may result in any divisional applications filed). Species election has not been shown to be proper, especially since it has been shown that the requisite showing of serious burden has not been made. Indeed, the search and examination of each Group would be likely to be co-extensive and, in any event, would involve such interrelated art that the search and examination of the entire application can be made without undue burden on the Examiner, especially as the claims of all Groups have identical classifications. Furthermore, the election requirement has not been shown to be proper, especially since there are relationships among the species. All of the preceding, therefore, mitigate against the present restriction.

Consequently, reconsideration and withdrawal of the election of species requirement are respectfully requested.

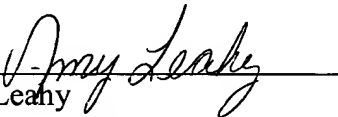
**CONCLUSION**

In view of the remarks herein, reconsideration and withdrawal of the restriction requirement and election of species, are requested.

It is believed that no fees are occasioned by entry of this paper. However the Commissioner is hereby authorized to charge any additional fees, or credit any overpayment in fees, to Deposit Account 50-0320.

Early and favorable consideration of the application on the merits, and early Allowance of the application are earnestly solicited.

Respectfully submitted,  
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